

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1.-14. (Cancelled)

15. (Currently Amended) A computer-usable program embodied on an information storage medium or in a carrier wave, in which is stored information for controlling an image generation system which generates an image of an object formed by a primitive surface; the program further comprising information necessary for implementing: hit check processing means for determining whether an object has been hit by a player using a controller;

impact computation means which computes an impact position at which an impact is imparted to the object hit in real-time;

distortion computation means which performs computations for causing the distortion of the primitive surface in the vicinity of the impact position; and

image generation means which generates an image of the object formed by the primitive surface that has been distorted after the impact was imparted to the object,

wherein the distortion computation means comprises point-to-be-moved determination means which determines at least one surface-specifying point that is to be moved, based on the impact position, from among surface-specifying points that are distributed over the surface of the object or in a vicinity of the object for defining the primitive surface that forms the object.

16. (Currently Amended) The program embodied on an information storage medium or in a carrier wave as defined in claim 15, wherein the distortion computation means further comprises:

~~point-to-be-moved determination means which determines at least one surface-~~

~~specifying point that is to be moved, based on the impact position, from among surface-specifying points that are distributed over the surface of the object or in the vicinity of the object for defining the primitive surface that forms the object;~~

means which computes at least one distortion point for specifying ~~the~~ shape of the primitive surface that is distorted by an impact; and

means which causes the position of the thus-determined at least one surface-specifying point to move to the at least one distortion point; ~~and~~

wherein the image generation means comprises information necessary for specifying the primitive surface based on the surface-specifying point that has been moved and for generating an image.

17. (Original) The information storage medium as defined in claim 16,

wherein the impact computation means further comprises means which calculates the magnitude and direction of the impact imparted to the object; and

wherein the program comprises information necessary for calculating the at least one distortion point from at least one of the impact position and the magnitude and direction of the impact.

18. (Currently Amended) The program embodied on an information storage medium or ~~on~~in a carrier wave as defined in claim 16,

the program further comprising information necessary for distributing the surface-specifying points in a predetermined density.

19. (Original) The program embodied on an information storage medium or in a carrier wave as defined in claim 16,

the program further comprising information necessary for distributing the surface-specifying points in an arrangement that deviates in a random manner from grid points.

20. (Currently Amended) ~~The program embodied on an information storage~~

~~medium or in a carrier wave as defined in claim 16,~~ A computer-usable program embodied on an information storage medium or in a carrier wave, in which is stored information for controlling an image generation system which generates an image of an object formed by a primitive surface, the program further comprising information necessary for implementing:
hit check processing means for determining whether an object has been hit by a player using a controller;

impact computation means which computes an impact position at which an impact is imparted to the object hit in real-time;

distortion computation means which performs computations for causing distortion of the primitive surface in a vicinity of the impact position;

image generation means which generates an image of the object formed by the primitive surface that has been distorted after the impact was imparted to the object; and

~~the program further comprising information necessary for adjusting~~ means which adjusts the density of distribution of the surface-specifying points in accordance with ~~at the~~ magnitude of distortion of the object due to an impact,

wherein the distortion computation means comprises point-to-be-moved determination means which determines at least one surface-specifying point that is to be moved, based on the impact position, from among surface-specifying points that are distributed over the surface of the object or in a vicinity of the object for defining the primitive surface that forms the object, and

the magnitude of distortion due to the impact is determined by at least one of a material of the object subjected to the impact and a type of the impact.

21. (Original) The program embodied on an information storage medium or in a carrier wave as defined in claim 16,

the program further comprising information necessary for ensuring that the point-to-

be-moved determination means determines a surface-specifying point in the vicinity of the impact position as a point to be moved.

22. (Original) The program embodied on an information storage medium or in a carrier wave as defined in claim 16,

the program further comprising information necessary for distributing the surface-specifying points in real-time after the object has been subjected to an impact.

23. (Original) The program embodied on an information storage medium or in a carrier wave as defined in claim 22,

the program further comprising information necessary for determining at least one of the range and density of distribution of the surface-specifying points in accordance with an impact that has been imparted to the object.

24. (Original) The program embodied on an information storage medium or in a carrier wave as defined in claim 16, the program further comprising information necessary for:

implementing texture mapping computation means which performs computations necessary for mapping a texture onto the primitive surface that has been distorted by an impact; and

causing the texture mapping computation means to perform texture mapping processing, using texture coordinates that corresponded to the surface-specifying point before movement, even when the surface-specifying point has been moved by an impact.

25. (Original) The program embodied on an information storage medium or in a carrier wave as defined in claim 16, the program further comprising information necessary for:

implementing texture mapping computation means which performs computations necessary for mapping a texture onto the primitive surface that has been distorted by an

impact; and

causing the texture mapping computation means to perform texture mapping processing, using texture coordinates which correspond to the impact position and are related to the surface-specifying point that has been moved by an impact.

26. (Original) The program embodied on an information storage medium or in a carrier wave as defined in claim 16,

the program further comprising information necessary for performing image generation for an object formed by polygonal surfaces having the surface-specifying points as vertices.

27. (Original) The program embodied on an information storage medium or in a carrier wave as defined in claim 16,

the program further comprising information necessary for implementing means which performs image generation by using a polygonal object having the surface-specifying points as vertices, and performs shading processing in such a manner that the vicinity of the vertices after a movement is darker, when the vertices have been moved by an impact.

28. (Currently Amended) A computer-usable program embodied on an information storage medium or in a carrier wave, in which is stored information for controlling an image generation system which generates an image of an object formed by a polygonal surface; the program comprising information necessary for implementing:
hit check processing for determining whether an object has been hit by a player using a controller;

object information storage means which stores information on the object formed by the polygonal surface having vertices that are a plurality of points distributed over the surface of the object at a predetermined density;

point-to-be-moved determination means that operates when an impact is imparted to

the object, for determining at least one vertex to be moved, based on an imparted impact position when an impact is imparted to the object hit in real-time;

means which causes the vertex to be moved to move, based on the magnitude and direction of the impact imparted to the object; and

image generation means which generates an image of the object after a distortion caused by the impact, using the vertex that has been moved.

29. (New) A game method which generates an image of an object formed by a primitive surface, the game method comprising:

performing hit check processing to determine whether an object has been hit by a player using a controller;

computing an impact position at which an impact is imparted to the object hit in real-time;

performing computations for causing distortion of the primitive surface in a vicinity of the impact position; and

generating an image of the object formed by the primitive surface that has been distorted after the impact was imparted to the object,

wherein the performing computations step comprises determining at least one surface-specifying point that is to be moved, based on the impact position, from among surface-specifying points that are distributed over the surface of the object or in a vicinity of the object for defining the primitive surface that formed the object.

30. (New) The game method as defined in claim 29, wherein the performing computations step further comprises:

computing at least one distortion point for specifying the shape of the primitive surface that is distorted by the impact; and

causing a position of the determined surface-specifying point to move to the distortion

point; and

wherein the generating step further comprises specifying the primitive surface based on the surface-specifying point that has been moved and generating an image.

31. (New) The game method as defined in claim 30,

wherein the computing an impact position step further comprises calculating the magnitude and direction of the impact imparted to the object; and

wherein the computing at least one distortion point step comprises calculating the at least one distortion point from at least one of the impact position and a magnitude and a direction of the impact.

32. (New) The game method as defined in claim 30,

wherein the surface-specifying points are distributed in a predetermined density.

33. (New) The game method as defined in claim 30,

wherein the surface-specifying points are distributed in an arrangement that deviates in a random manner from grid points.

34. (New) A game method which generates an image of an object formed by a primitive surface, the game method comprising:

performing hit check processing to determine whether an object has been hit by a player using a controller;

computing an impact position at which an impact is imparted to the object hit in real-time;

performing computations for causing distortion of the primitive surface in a vicinity of the impact position; and

generating an image of the object formed by the primitive surface that has been distorted by the impact imparted to the object,

wherein the performing computations step comprises determining at least one surface-

specifying point that is to be moved, based on the impact position, from among surface-specifying points that are distributed over the surface of the object or in a vicinity of the object for defining the primitive surface forming the object,

a density of distribution of the surface-specifying points is adjusted in accordance with a magnitude of distortion of the object due to an impact, and

the magnitude of distortion of the object due to the impact is determined by at least one of a material of the object subjected to the impact and a type of the impact.

35. (New) The game method as defined in claim 30, wherein the point-to-be-moved determination means determines a surface-specifying point in the vicinity of the impact position as a point to be moved.

36. (New) The game method as defined in claim 30, wherein the surface-specifying points are distributed in real-time after the object has been subjected to an impact.

37. (New) The game method as defined in claim 36, wherein at least one of the range and density of distribution of the surface-specifying points is determined in accordance with an impact that has been imparted to the object.

38. (New) The game method as defined in claim 30, further comprising performing computations necessary for mapping a texture onto the primitive surface that has been distorted by an impact, including performing texture mapping processing, using texture coordinates that corresponded to the surface-specifying point before movement, even when the surface-specifying point has been moved by an impact.

39. (New) The game method as defined in claim 30, further comprising performing computations necessary for mapping a texture onto the primitive surface that has been distorted by an impact, including performing texture mapping processing, using texture coordinates which correspond to the impact position and are related to the surface-specifying

point that has been moved by an impact.

40. (New) The game method as defined by claim 30, wherein image generation is performed for an object formed by polygonal surfaces having the surface-specifying points as vertices.

41. (New) The game method as defined in claim 30, further comprising: performing image generation by using a polygonal object having the surface-specifying points as vertices, and performs shading processing in such a manner that the vicinity of the vertices after movement is darker, when the vertices have been moved by an impact.

42. (New) A game method which generates an image of an object formed by a polygonal surface, the method comprising:

- storing information on the object formed by the polygonal surface having vertices that are a plurality of points distributed over the surface of the object at a predetermined density;
- performing hit check processing to determine whether an object has been hit by a player using a controller;
- determining at least one vertex to be moved, based on an imparted impact position when an impact is imparted to the object hit in real-time;
- moving the vertex to be moved, based on the magnitude and direction of the impact imparted to the object; and
- generating an image of the object after a distortion caused by the impact, using the vertex that has been moved.